$\begin{array}{c} {\rm JON~M.~HUNTSMAN, JR.} \\ {\it Governor} \end{array}$

GARY HERBERT Lieutenant Governor

11532

Department of Environmental Quality

Richard W. Sprott Executive Director

DIVISION OF AIR QUALITY Cheryl Heying Director

Title V Operating Permit

PERMIT NUMBER: 900001002 **DATE OF PERMIT:** March 8, 2007 Date of Last Revision: February 6, 2008

This Operating Permit is issued to, and applies to the following:

Name of Permittee:		Permitted Location:
Questar Pipeline Company 1140 West 200 South PO Box 45360 Salt Lake City, UT 84145		Kastler/Marushack Compressor Station Section 16, T3N, R24E N4539184 E 650257 Daggett County, UT 84145
UTM coordinates: SIC code:	650,464 m Easting, 4,539,634 4922 (Natural Gas Transmissio	
UTAH AIR QUALITY	Y BOARD	
By:		Prepared By:
M. Cheryl Heying, Executive Secretary		Brandy Cannon

ENFORCEABLE DATES AND TIMELINES

The following dates or timeframes are referenced in Section I: General Provisions of this permit.

Annual Certification Due: March 31 of every calendar year that this permit is in force.

Renewal application due: September 8, 2011

Permit expiration date: March 8, 2012

Definition of "prompt": written notification within 14 days.

ABSTRACT

The Kastler Compressor Station compresses natural gas for injection and delivery into a natural gas reservoir. Six reciprocating internal combustion engines and three gas turbines are used to drive nine compressors in the station. Natural gas is the fuel source for the engines and turbines. The station also includes the Clay Basin Dew Point (CBDP) Process Unit. The CBDP process unit receives and processes natural gas from a storage reservoir and from the main lines. The CBDP process unit includes an ethylene glycol regenerator, liquid hydrocarbon loading rack, and miscellaneous process stream equipment. The Kastler Compressor Station is a major source of NO_x , CO and VOC and is subject to NSPS Subparts A, GG, and KKK.

OPERATING PERMIT HISTORY

Permit/Activity	Date Issued	Recorded Changes
_		
Title V administrative amendment - enhanced AO (Project #OPP0115320006)	2/6/2008	Changes: Incorporate provisions approved in DAQE-AN0115320007A-08, 1/23/08, to allow use of portable testing monitors in NOx and CO monitoring for ICE-1 and ICE-2, and to expand gas processing capacity by installing three JT skids, two process heaters (less than 5 MMBtu/hr each), and a flare to control emissions from the ethylene glycol regenerator.
Title V renewal application (Project #OPP0115320004)	3/8/2007	Changes: One unit identified as subject to CAM.
Title V significant modification (Project #OPP0115320003)	3/26/2002	Changes: Add a compressor unit.
Title V administrative amendment by source (Project #OPP0115320002)	4/18/2001	Changes: Add the Clay Basin Dew Point Process Unit to further process the gas stream at the Kastler Compressor Station.
Title V initial application (Project #OPP0115320001)	11/20/1998	

Table of Contents

ENFORCEABLE DATES AND TIMELINES	2
ABSTRACT	2
OPERATING PERMIT HISTORY	3
SECTION I: GENERAL PROVISIONS	5
Federal Enforcement.	5
Permitted Activity(ies).	5
Duty to Comply	5
Permit Expiration and Renewal	6
Application Shield	6
Severability.	6
Permit Fee.	6
No Property Rights	6
Revision Exception.	
Inspection and Entry.	6
Certification	7
Compliance Certification.	
Permit Shield.	8
Emergency Provision.	8
Operational Flexibility.	
Off-permit Changes	
Administrative Permit Amendments.	
Permit Modifications	
Records and Reporting.	
Reopening for Cause.	
Inventory Requirements.	
Title IV and Other, More Stringent Requirements	
SECTION II: SPECIAL PROVISIONS	12
Emission Unit(s) Permitted to Discharge Air Contaminants.	12
Requirements and Limitations	14
Conditions on permitted source (Source-wide)	
Conditions on Turbines for Gas Compression (ICE-1)	
Conditions on Turbines for Backup Power (ICE-2)	
Conditions on Internal Combustion Engine - Controlled (ICE-4)	
Conditions on Miscellaneous Process Stream Equipment (CBDP-1)	
Emissions Trading	
Alternative Operating Scenarios	
SECTION III: PERMIT SHIELD	
SECTION IV: ACID RAIN PROVISIONS	
This source is not subject to Title IV. This section is not applicable	
REVIEWER COMMENTS	
REVIEWER CUMINIEN 15	JJ

Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

SECTION I: GENERAL PROVISIONS

I.A Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B **Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C **Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
 - The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.C.3

I.D Permit Expiration and Renewal.

- I.D.1 This permit is issued for a fixed term of five years and expires on the date shown under "Enforceable Dates and Timelines" at the front of this permit. (R307-415-6a(2))
- I.D.2 Application for renewal of this permit is due on or before the date shown under "Enforceable Dates and Timelines" at the front of this permit. An application may be submitted early for any reason. (R307-415-5a(1)(c))
- I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))
- I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G Permit Fee.

- I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))
- I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J Inspection and Entry.

I.J.1 Upon presentation of credentials and other documents as may be required by law, the

permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L Compliance Certification.

- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than the date shown under "Enforceable Dates and Timelines" at the front of this permit, and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
 - The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
 - The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible

I.L.1.c

I.L.1.b

exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

Such other facts as the Executive Secretary may require to determine the compliance status.

The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

I.M Permit Shield.

I.L.1.d

I.L.2

I.M.1.a

I.M.1.b

I.M.2.b

I.M.2.c

I.M.2.d

I.N.2

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)

The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N Emergency Provision.

I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a	An emergency occurred and the permittee can identify the causes of the emergency. $(R307-415-6g(3)(a))$
I.N.2.b	The permitted facility was at the time being properly operated. (R307-415- $6g(3)(b)$)
I.N.2.c	During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
I.N.2.d	The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
I.N.3	In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. $(R307-415-6g(4))$
I.N.4	This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. $(R307-415-6g(5))$
I.O	Operational Flexibility.
	Operational flexibility is governed by R307-415-7d(1).
I.P	Off-permit Changes.
	Off-permit changes are governed by R307-415-7d(2).
I.Q	Administrative Permit Amendments.
	Administrative permit amendments are governed by R307-415-7e.
I.R	Permit Modifications.
	Permit modifications are governed by R307-415-7f.
I.S	Records and Reporting.
I.S.1	Records.
I.S.1.a	The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))
I.S.1.b	For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-60(2)(b)(i))

I.S.1.b.1

measurement.

The date, place as defined in this permit, and time of sampling or

6a(3)(b)(i))

I.S.1.b.2	The date analyses were performed.
I.S.1.b.3	The company or entity that performed the analyses.
I.S.1.b.4	The analytical techniques or methods used.
I.S.1.b.5	The results of such analyses.
I.S.1.b.6	The operating conditions as existing at the time of sampling or measurement.
I.S.1.c	Additional record keeping requirements, if any, are described in Section II, Special Provisions.
I.S.2	Reports.
I.S.2.a	Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
I.S.2.b	All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)
I.S.2.c	The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. Prompt, as used in this condition, shall be defined as written notification within the number of days shown under "Enforceable Dates and Timelines" at the front of this permit. Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
I.S.3	Notification Addresses.
I.S.3.a	All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:
	Utah Division of Air Quality P.O. Box 144820

All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications:

Phone: 801-536-4000

Environmental Protection Agency, Region VIII Office of Enforcement, Compliance and Environmental Justice (mail code 8ENF) 1595 Wynkoop Street Denver, CO 80202-1129

I.S.3.b

Salt Lake City, UT 84114-4820

For reports, notifications, or other correspondence related to permit modifications, applications, etc.:

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance Air & Radiation Program (mail code 8P-AR)
1595 Wynkoop Street
Denver, CO 80202-1129

Phone: 303-312-6440

I.T Reopening for Cause.

I.T.1.b

I.T.1.c

I.T.1.d

I.T.2

I.T.3

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the Acid Rain Program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into this permit. (R307-415-7g(1)(b))

Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U Inventory Requirements.

An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.V Title IV and Other, More Stringent Requirements

Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, Acid Deposition Control, both provisions shall be incorporated into this permit. (R307-415-6a(1)(b))

SECTION II: SPECIAL PROVISIONS

II.A Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 Permitted Source

Source-wide

II.A.2 ICE-1: Turbines for Gas Compression

Three pipeline quality natural gas-fired turbines rated at 5,152 Hp each. Turbines are used to compress gas and each turbine is equipped with low NO_x burners.

II.A.3 ICE-2: Turbines for Backup Power

Two pipeline quality natural gas-fired turbines rated at 800 kW each. Turbines used to generate backup power only.

II.A.4 ICE-3: Internal Combustion Engines

Five pipeline quality natural gas-fired reciprocating internal combustion engines (ICE) rated at 2,600 Hp each. These reciprocating ICEs are used to compress gas. No unit-specific applicable requirements.

II.A.5 ICE-4: Internal Combustion Engine - Controlled

One pipeline quality natural gas-fired reciprocating internal combustion engine (ICE) rated at 1,680 Hp. The engine is equipped with three-way non-selective catalytic reduction and is used to compress gas.

II.A.6 EC-1: Hot Water Boiler

One pipeline quality natural gas-fired hot water boiler rated at 3.4 MMBtu/hr. No unit-specific applicable requirements.

II.A.7 EC-2: Miscellaneous Heating Units

Ten pipeline-quality natural gas-fired heating units; units are rated at 0.27, 1.0, 1.0, 0.6, 0.695 and three at 0.032 MMBtu/hr. The HMO heater and tank heater are rated at less than 5 MMBtu/hr each.

II.A.8 TNK-1: Condensate Tanks

Two 16,800 gallon, one 12,600 gallon, and two 1,000 gallon condensate tanks. No unit-specific applicable requirements.

II.A.9 TNK-2: Underground Gasoline Storage Tank

One 12,000 gallon underground gasoline storage tank.

II.A.10 TNK-3: Diesel Tanks

Two 560 gallon diesel storage tanks. No unit-specific applicable requirements.

II.A.11 TNK 4: Triethylene Glycol Tanks

One 8,820 gallon and one 6,300 gallon triethylene glycol storage tanks. No unit-specific applicable requirements.

II.A.12 TNK-5: Ambitrol Tanks

Two 3,178 gallon ethylene glycol storage tanks. No unit-specific applicable requirements.

II.A.13 TNK-6: Methanol/Corrosion Inhibitor Tank

One 3,959 gallon methanol/corrosion inhibitor storage tank. No unit-specific applicable requirements.

II.A.14 TNK-7: Waste Water Tank

One 11,382 gallon and one 500 gallon waste water storage tanks.

II.A.15 TNK-8: Waste Oil Tank 1

One 16,800 gallon waste oil storage tank. No unit-specific applicable requirements.

II.A.16 TNK-9: Waste Oil Tank 2

One 2,500 gallon waste oil storage tank. No unit-specific applicable requirements.

II.A.17 TNK-9a: Waste Oil Tank 3

One 500 gallon waste oil storage tank. No unit-specific applicable requirements.

II.A.18 TNK-10: Oil Tanks

One 2,500 gallon and one 5,000 gallon oil storage tanks. No unit-specific applicable requirements.

II.A.19 TNK-11: Lube Oil Tanks

One 2,085 gallon and one 500 gallon lube oil storage tank. No unit-specific applicable requirements.

II.A.20 TNK-12: Methanol Tank

One 500 gallon methanol storage tank. No unit-specific applicable requirements.

II.A.21 TNK-13: Pressurized Condensate Tanks

Two 45,000 gallon condensate tanks associated with the loading rack in the Clay Basin Dew Point process unit. No unit-specific applicable requirements.

II.A.22 TNK-14: Oil Expansion Tank

One 6,900 gallon expansion tank for heat transfer oil. No unit-specific applicable requirements.

II.A.23 MISC-1: Venting of Natural Gas

Three vents for methane and ethane. No unit-specific applicable requirements.

II.A.24 MISC-2: Miscellaneous Parts Cleaner

Parts washer using mineral spirits. No unit-specific applicable requirements.

II.A.25 MISC-3: Dew Point Plant Gas Vent

Vent pipe to remove any vapors that may be present in the DPP building. No unit-specific applicable requirements.

II.A.26 CBDP-1: Misc. Process Stream Equipment

Equipment in Dew Point process unit including pumps, compressors, pressure relief devices, open-ended valves and lines, valves, flanges and other connectors that is in VOC or wet gas service. Includes equipment in CBDP-2, CBDP-3, CBDP-4, EC-3, and TNK-13.

II.A.27 CBDP-2: Liquid Hydrocarbon Loading Rack

One liquid hydrocarbon loading rack controlled using a vapor balancing system. No unit-specific applicable requirements.

II.A.28 CBDP-3: Ethylene Glycol Regenerator

One rich/lean exchanger, one flash tank, and one still. A flare controls the reflux vent stream from the ethylene glycol regenerator.

II.A.29 CBDP-4: JT Processing Skids

Three JT processing skids, with a 3-phase separator and stabilizer tower, remove liquid hydrocarbons from the natural gas stream and lower the cricondentherm dew point of the gas.

II.A.30 **EC-3: Hot Oil Heater**

One pipeline quality natural gas-fired heater rated at 3.0 MMBtu/hr, used for heat transfer in the CBDP process unit. No unit-specific applicable requirements.

II.B Requirements and Limitations

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated:

II.B.1 Conditions on permitted source (Source-wide)

II.B.1.a Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(2) and 40 CFR 60.11(d)

II.B.1.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.a.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.b Condition:

Visible emissions shall be no greater than 10 percent opacity from all natural gas-fired emission units. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.1.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.b.2 **Recordkeeping:**

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn pipeline quality natural gas;
- (2) Documentation that the fuels other than pipeline quality natural gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only pipeline quality natural gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.c Condition:

The permittee shall demonstrate that installation and operation of the following emission units do not result in a significant emission increase (as described in 40 CFR 52.21(a)(2) and defined in R307-101-2) of NO_x .

- (i) JT Processing Skids (CBDP-4)
- (ii) Flare controlling the Ethylene Glycol Regenerator (CBDP-3)
- (iii) HMO and tank heaters in Miscellaneous Heating Units (EC-2)

[Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.1.c.1 **Monitoring:**

The permittee shall calculate monthly emissions of NO_x from the existing Internal Combustion Engines-Uncontrolled (ICE-3) and existing Turbines for Gas Compression (ICE-1) by monitoring the hours of operation and utilizing emission factors from the most recent testing.

The permittee shall maintain a 12-month rolling total of incremental NO_x emissions increase attributed to the operation of the new equipment listed in condition II.B.1.c. Each month, a new 12-month total shall be calculated using data from the previous 12 months. As prescribed in 40 CFR 52.21(a)(2), the emissions increase attributable to operation of the new equipment shall be calculated as the difference between the pre-modification (baseline) actual emissions for the existing equipment and the post-modification actual emissions of the existing plus new equipment.

If at any time the calculations required in this condition indicate that a significant increase in emissions (due to this modification, i.e., installation and operation of the new equipment listed in condition II.B.1.c) has occurred, then the permittee shall follow the procedure described in 40 CFR 52.21(b)(3) for determining whether or not there has been a significant net emission increase. If both a significant emission increase and a significant net emission increase have occurred as a result of this modification, the modification shall be subject to PSD review as specified in R307-405-1 and 40 CFR 52.21(a)(2).

II.B.1.c.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.c.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2 <u>Conditions on Turbines for Gas Compression (ICE-1)</u>

II.B.2.a **Condition:**

Sulfur content of any natural gas burned shall be no greater than 0.8% by weight. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60 Subpart GG

II.B.2.a.1 **Monitoring:**

The Federal Energy Regulator Commission (FERC) gas tariff serves as the monitoring.

II.B.2.a.2 **Recordkeeping:**

The total sulfur limit in the FERC gas tariff shall be recorded and converted to percent sulfur by weight to determine the sulfur content.

II.B.2.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.b **Condition:**

Combined hours of operation shall be no greater than 24,120 hours per rolling 12-month period. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.2.b.1 **Monitoring:**

An hour meter shall be used to continuously monitor the hours of operation for the affected equipment. Readings shall be taken monthly to determine the total operating hours for that month. Compliance with the limitation shall be determined on a rolling 12-month total. Each month, a new 12-month total shall be calculated using data from the previous 12 months.

II.B.2.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c Condition:

Emissions of NO_x shall be no greater than 7.43 lb/hr and 0.0042% by volume (15% O_2 , dry) for each turbine. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT] and 40 CFR 60 Subpart GG

II.B.2.c.1 **Monitoring:**

Stack testing shall be performed as specified here:

- (a) Frequency. Each unit shall be tested every five years, based on the date of the latest stack test.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Sample Point The emission sample points shall be selected following Method 20 or Method 1in accordance with 40 CFR 60.335(4) and (5).
- (d) Methods
 - (1) 40 CFR 60, Appendix A, Method 20; ASTM D6522-00; or 40 CFR 60, Appendix A, Method 7E and either 40 CFR 60, Appendix A Method 3 or 3A, to determine NOX and diluent concentration:
 - (2) 40 CFR 60, Appendix A, Method 19 may be used to determine the volumetric flow rate based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.
 - (3) Fuel-bound nitrogen content factor F shall be 0;
- (e) Calculations. The nitrogen oxides emission rate (NO_x) shall be computed for each run using the following equation:

 $NO_x = (NO_x o) (Pr/Po)0.5 e19 (Ho-0.00633) (288°K/Ta)1.53$

where:

 NO_x = emission rate of NO_x at 15% O_2 and ISO standard ambient conditions, volume percent.

 $NO_xo = observed NO_x concentration, ppm by volume.$

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po = observed combustor inlet absolute pressure at test, mm Hg.

Ho = observed humidity of ambient air, g H_2O/g air.

e = transcendental constant, 2.718.

Ta = ambient temperature, °K.

To determine mass emission rates (lb/hr, etc.), the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(f) Production Rate During Testing. The operational rate during all compliance testing shall be no less than 90% of the maximum rate achieved in the previous three (3) years

II.B.2.c.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.c.3 **Reporting:**

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.2.d **Condition:**

Emissions of CO shall be no greater than 5.38 lb/hr and 50 ppmdv (15% O₂, dry) for each turbine. [DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.2.d.1 **Monitoring:**

Stack testing shall be performed as specified here:

- (a) Frequency. Test every five years (based on the date of the latest stack test) using 40 CFR 60, Appendix A, Method 10, 10A, or 10B or every two years with a portable testing monitor. If a portable testing monitor is to be used, a correlation must be established during the initial test between the portable testing monitor and the reference method test. Subsequently, the portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (d) Methods to be used:
 - (1) To determine stack volumetric flow rate 40 CFR 60, Method 19 based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.
 - (2) To test for CO emissions 40 CFR 60, Appendix A, Method 10, 10A, or 10B. A portable testing monitor may be used in lieu of the reference test method provided the requirements of (a) are met. If the requirements of (a) are not met, the reference test method must be used for subsequent tests.
- (e) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation.
- (f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.2.d.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.d.3 **Reporting:**

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.3 Conditions on Turbines for Backup Power (ICE-2)

II.B.3.a **Condition:**

Combined hours of operation shall be no greater than 400 hours per rolling 12-month period. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.3.a.1 **Monitoring:**

An hour meter shall be used to continuously monitor the hours of operation for the affected equipment. Readings shall be taken monthly to determine the total operating hours for that month. Compliance with the limitation shall be determined on a rolling 12-month total. Each month, a new 12-month total shall be calculated using data from the previous 12 months.

II.B.3.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b **Condition:**

Emissions of NO_x shall be no greater than 3.80 lb/hr and 76.4 ppmdv (15% O_2 , dry) for each generator. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.3.b.1 **Monitoring:**

Stack testing shall be performed as specified here:

- (a) Frequency. Test every five years (based on the date of the latest stack test) using 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E or every two years with a portable testing monitor. If a portable testing monitor is to be used, a correlation must be established during the initial test between the portable testing monitor and the reference method test. Subsequently, the portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.
- (d) Methods to be used:
 - (1) To determine stack volumetric flow rate 40 CFR 60, Method 19 based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.
 - (2) To test for NO_x emissions 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E. A portable testing monitor may be used in lieu of the reference test method provided the requirements of (a) are met. If the requirements of (a) are not met, the reference test method must be used for subsequent tests.

- (e) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation.
- (f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.3.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.3.b.3 **Reporting:**

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.4 Conditions on Internal Combustion Engine - Controlled (ICE-4)

II.B.4.a **Condition:**

Emissions of NO_x shall be no greater than 3.70 lb/hr. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.4.a.1 **Monitoring:**

- I. Stack testing shall be performed as specified below:
 - (a) Testing Frequency: Test every 2200 hours of operation or every five years (based on the date of the latest stack test), whichever comes first, using 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E. Additionally, if an excursion (as defined below) occurs, the unit shall be tested with a portable testing monitor upon restart. The portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years.
 - (b) Notification: The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary. Notification shall not be required for post-excursion testing using the portable testing monitor.

(c) Methods

- (1) Sample Location: The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA)) approved access shall be provided to the test location
- (2) Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2 or 40 CFR 60, Appendix A, Method 19 based on the fuel flow determined by fuel gas meter and exhaust gas O₂ concentration.
- (3) Oxides of Nitrogen (NO_x): 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E must be used for the initial test. After performing the initial test, a portable NO_x monitor may be used in lieu of Method 7, 7A, 7B, 7C, 7D or 7E provided the requirements of I(a) are met. If the requirements of I(a) are not met, Method 7, 7A, 7B, 7C, 7D or 7E must be used for subsequent tests.

- (d) Calculations: To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing: The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.
- II. Monitor CAM Indicator #1 (Oxygen from engine) in accordance with 40 CFR 64.7(c) when unit is operating
 - (a) Measurement approach: Oxygen concentration into the catalyst is measured continuously using sensors in the exhaust stream.
 - (b) Indicator range: An excursion is defined as oxygen concentration less than 0.5%. An excursion will cause the controller to log an alarm and shut down the unit. If an excursion occurs, corrective action will be taken in accordance with 40 CFR 64.7(d)(1).
 - (c) Performance criteria:
 - (1) Data representativeness: Concentrations are measured while engine is operating.
 - (2) Verification of operational status: "Oxygen-sensor health" as monitored by control system shall be greater than 35%.
 - (3) QA/QC practices and criteria: Oxygen sensors shall be replaced prior to failure by monitoring "Oxygen sensor health"
 - (4) Monitoring frequency: Oxygen concentration shall be measured continuously. The unit will be checked daily for alarms and/or shutdowns.
 - (5) Data collection: Each daily reading shall be documented by the observer. .
- III. Monitor CAM Indicator #2 (Pressure drop across catalyst) in accordance with 40 CFR 64.7(c) when unit is operating
 - (a) Measurement approach: Measure pressure drop across catalyst beds using a differential pressure gauge.
 - (b) Indicator range: An excursion is defined as a pressure drop of five (5) inches of water or greater beyond the baseline value determined in the most recent test, based on the measurement at the time of inspection. If an excursion occurs, corrective action will be taken in accordance with 40 CFR 64.7(d)(1).
 - (c) Performance criteria:
 - (1) Data representativeness: Pressure drop is measured at catalyst inlet and outlet during engine operation.
 - (2) Verification of operational status: Pressure gauge is functioning correctly.
 - (3) QA/QC practices and criteria: Pressure gauge shall be calibrated and pressure taps checked for plugging when gauge malfunction is evident during daily check.
 - (4) Monitoring frequency: Inlet and outlet pressure shall be continuously measured and inspected daily.
 - (5) Data collection: Each daily reading shall be documented by the observer.
- IV. Monitor CAM Indicator #3 (Temperature of exhaust entering catalyst) in accordance with 40 CFR 64.7(c) when unit is operating

- (a) Measurement approach: Temperature of gas flowing from the engine to the catalyst is measured daily using a thermocouple mounted in the gas stream.
- (b) Indicator range: An excursion is defined as a temperature outside the catalyst operating range of 750-1350 degrees F (399-732 degrees C), as read at the time of inspection. If an excursion occurs, corrective action will be taken in accordance with 40 CFR 64.7(d)(1).
- (c) Performance criteria:
 - (1) Data representativeness: Temperature is measured at the inlet to the catalyst beds using a thermocouple. Temperature during 9/14/05 test was 1063 +/- 1 degrees F (573 +/- 1 degrees C).
 - (2) Verification of operational status: No control system alarms or shutdowns have occurred.
 - (3) QA/QC practices and criteria: Thermocouple is replaced when a malfunction is detected.
 - (4) Monitoring frequency: Catalyst inlet temperature shall be measured continuously and inspected daily.
 - (5) Data collection: Each daily reading shall be documented by the observer. .

II.B.4.a.2 **Recordkeeping:**

Results of all monitoring shall be maintained as described in Provision I.S.1 of this permit. In addition, the permittee shall maintain a file of the occurrence and duration of any excursion, corrective actions taken, and any other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. (40 CFR 64.9(b))

II.B.4.a.3 **Reporting:**

- I) Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.
- II) In addition to the reporting requirements described in Provision I.S.2 of this permit, the monitoring report required by Provision I.S.2.a shall include, at a minimum, the following information, as applicable: (a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; (40 CFR 64.9(a)(2)(i))

II.B.4.b **Condition:**

Emissions of CO shall be no greater than 3.70 lb/hr. [Origin: DAQE-AN0115320007A-08] Authority: R307-401-8(1)(a) [BACT]

II.B.4.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Testing Frequency: Test every five years (based on the date of the latest stack test) using 40 CFR 60, Appendix A, Method 10 or every two years with a portable testing monitor. If portable testing monitor is to be used, a correlation must be established during the initial test between the

portable testing monitor and Method 10. Subsequently, the portable testing monitor results shall be correlated with the results of the periodic reference method test at least once every five years.

(b) Notification: The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

(c) Methods

(1) Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA)) approved access shall be provided to the test location

(2) Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or 40 CFR 60, Appendix A, Method 19 based on the fuel flow determined by fuel gas meter and exhaust gas O₂ concentration.

(3) Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10 must be used for the initial test. After performing the initial test, a portable CO monitor may be used in lieu of Method 10 provided the requirements of (a) are met. If the requirements of (a) are not met, Method 10 must be used for subsequent tests.

(d) Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.4.b.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.b.3 **Reporting:**

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.4.c Condition:

For each compressor, the permittee shall comply with the requirements of 40 CFR 60.482-3, as soon as practicable, but no later than 180 days after initial startup of the affected process unit, or demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service. [Origin: 40 CFR 60 Subpart KKK] Authority: 40 CFR 60.632(a) and (f)

II.B.4.c.1 **Monitoring:**

For each compressor, the permittee shall:

- a. demonstrate compliance with the requirements of 40 CFR 60.482-3 within 180 days of initial startup of the affected process unit and comply with the monitoring requirements of 40 CFR 60.482-3 after the initial compliance demonstration; or
- b. demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-3 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.4.c.2 **Recordkeeping:**

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For compressors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j), 40 CFR 60.635(c) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.4.c.3 **Reporting:**

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c), and (e). For compressors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.5 Conditions on Miscellaneous Heating Units (EC-2)

II.B.5.a **Condition:**

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed by March 12, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: R307-401-18] Authority: R307-401-18

II.B.5.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.5.a.2 **Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.5.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6 Conditions on Miscellaneous Process Stream Equipment (CBDP-1)

II.B.6.a **Condition:**

For each pump in light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-2 or demonstrate that the pump is neither in VOC service nor in wet gas service. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60.632(a) and (f)

II.B.6.a.1 **Monitoring:**

For each pump in light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-2; or
- b. demonstrate that the pump is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-2 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c). The permittee shall demonstrate that a pump is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.6.a.2 **Recordkeeping:**

For pumps in light liquid service, except those pumps where it is demonstrated that the pump is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For pumps in light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.6.a.3 **Reporting:**

For pumps in light liquid service, except those pumps where it is demonstrated that the pump is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c) and (e). For pumps in light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.6.b **Condition:**

For each compressor, the permittee shall comply with the requirements of 40 CFR 60.482-3 or demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60.632(a) and (f)

II.B.6.b.1 **Monitoring:**

For each compressor, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-3; or
- b. demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-3 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.6.b.2 **Recordkeeping:**

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For compressors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j), 40 CFR 60.635(c) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.6.b.3 **Reporting:**

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c), and (e). For compressors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.6.c Condition:

For each pressure relief device in gas/vapor service, the permittee shall comply with the requirements of 40 CFR 60.482-4 or 40 CFR 60.633(b) or demonstrate that the pressure relief device is neither in VOC service nor in wet gas service. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60.632(a) and (f)

II.B.6.c.1 **Monitoring:**

For each pressure relief device in gas/vapor service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-4 or 40 CFR 60.633(b); or
- b. demonstrate that the pressure relief device is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-4 and 40 CFR 60.633(b) will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.6.c.2 **Recordkeeping:**

For pressure relief devices in gas/vapor service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a), (e) and (k), and 40 CFR 60.635(b). For pressure relief devices in gas/vapor service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.6.c.3 **Reporting:**

For pressure relief devices in gas/vapor service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c) and (e), and 40 CFR 60.636(b) and (c). For pressure relief devices in gas/vapor service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.6.d **Condition:**

For each open-ended valve and line, the permittee shall comply with the requirements of 40 CFR 60.482-6 or demonstrate that the open-ended valve or line is neither in VOC service nor in wet gas service. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60.632(a) and (f)

II.B.6.d.1 **Monitoring:**

For each open-ended valve and line, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-6; or
- b. demonstrate that the open-ended valve or line is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-6 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a).

II.B.6.d.2 **Recordkeeping:**

For open-ended valves and lines, except those open-ended valves and lines where it is demonstrated that the open-ended valve or line is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a), (e) and (k). For open-ended valves and lines, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.6.d.3 **Reporting:**

For open-ended valves and lines, except those open-ended valves and lines where it is demonstrated that the open-ended valve or line is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For open-ended valves and lines, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.6.e Condition:

For each valve in gas/vapor service or light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-7 or demonstrate that the valve is neither in VOC service nor in wet gas service. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60.632(a) and (f)

II.B.6.e.1 **Monitoring:**

For each valve in gas/vapor service or light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-7; or
- b. demonstrate that the valve is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-7 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c). The permittee shall demonstrate that a valve is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.6.e.2 **Recordkeeping:**

For valves in gas/vapor service or light liquid service, except those valves where it is demonstrated that the valve is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e - g), and (k). For valves in gas/vapor service or light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.6.e.3 **Reporting:**

For valves in gas/vapor service or light liquid service, except those valves where it is demonstrated that the valve is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - e). For valves in gas/vapor service or light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.6.f **Condition:**

For each pressure relief device in light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-8 or demonstrate that the pressure relief device is neither in VOC service nor in wet gas service. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60.632(a) and (f)

II.B.6.f.1 **Monitoring:**

For each pressure relief device in light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-8; or
- b. demonstrate that the pressure relief device is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-8 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a, b). The permittee shall demonstrate that a pressure relief device is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.6.f.2 **Recordkeeping:**

For pressure relief devices in light liquid service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), and (k). For pressure relief devices in light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.6.f.3 **Reporting:**

For pressure relief devices in light liquid service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For pressure relief devices in light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.6.g **Condition:**

For each flange and other connector, the permittee shall comply with the requirements of 40 CFR 60.482-8 or demonstrate that the flange or other connector is neither in VOC service nor in wet gas service. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60.632(a) and (f)

II.B.6.g.1 **Monitoring:**

For each flange and other connector, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-8; or
- b. demonstrate that the flange or other connector is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-8 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a, b).

II.B.6.g.2 **Recordkeeping:**

For flanges and other connectors, except those flanges and other connectors where it is demonstrated that the flange or other connector is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), and (k). For flanges and other connectors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.6.g.3 **Reporting:**

For flanges and other connectors, except those flanges and other connectors where it is demonstrated that the flange or other connector is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For flanges and other connectors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.6.h Condition:

The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [Origin: DAQE-AN0115320007A-08] Authority: 40 CFR 60 (Subpart A)

II.B.6.h.1 **Monitoring:**

The permittee shall comply with the monitoring requirements of 40 CFR 60.8(a), (b), (c), (e) and (f), 60.11(a), and 60.13(b), (f), and (i).

II.B.6.h.2 **Recordkeeping:**

The permittee shall comply the recordkeeping requirements of provision I.S.1 of this permit and any additional recordkeeping requirements of 40 CFR 60.7(f).

II.B.6.h.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and the reporting and notification requirements of 40 CFR 60.4, 60.6(b), 60.7(a) and (c), 60.8(a), 60.13(i), 60.15(d), and 60.19. The requirements of 40 CFR 60.8(d) do not apply to the affected process unit except that the permittee must notify the Executive Secretary of the schedule for the initial performance tests at least 30 days before the initial performance tests.

II.B.6.i Condition:

The flare shall be designed and operated in accordance with 40 CFR 60.18 (c) through (f). The flare shall be operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. The flare shall be operated with a flame present at all times. [Origin: 40 CFR 60.633(g) (Subpart KKK), 40 CFR 60.18 (Subpart A)] Authority: 40 CFR 60.632(a), 40 CFR 60.633(g)

II.B.6.i.1 **Monitoring:**

A visual determination of each affected emission unit shall be conducted on a monthly basis using 40 CFR 60, Appendix A, Method 22. A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

II.B.6.i.2 **Recordkeeping:**

Results of monitoring, and any calculations required by 40 CFR 60.18, shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.6.i.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6.j **Condition:**

The permittee shall notify the Executive Secretary in writing when the installation of new equipment in the affected unit has been completed and is operational, as an initial compliance inspection is required. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed by March 12, 2009, the Executive Secretary shall be notified in writing on the status of the installation. At that time, the Executive Secretary shall require documentation

of the continuous installation of the operation and may revoke construction approval in accordance with R307-401-18, UAC. [Origin: R307-401-18] Authority: R307-401-18

II.B.6.j.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.6.j.2 **Recordkeeping:**

As applicable, the permittee shall maintain a copy of each notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.6.j.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C Emissions Trading

(R307-415-6a(10))

Not applicable to this source.

II.D Alternative Operating Scenarios.

(R307-415-6a(9))

Not applicable to this source.

SECTION III: PERMIT SHIELD

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M, Permit Shield:

III.A 40 CFR 68 (Chemical Accident Prevention Provisions)

This regulation is not applicable to the Permitted Source for the following reason(s): this source is regulated under 49 CFR Parts 192, 193 or 195 and does not meet the definition of stationary source for this part. [Last updated November 29, 2007]

III.B 40 CFR 63 Subpart R (National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations))

This regulation is not applicable to the Permitted Source for the following reason(s): this source is not a major source of hazardous air pollutants (63.420(b)(2)). [Last updated November 29, 2007]

III.C 40 CFR 63 Subpart H (National Emission Standards for Organic HAPs for Equipment Leaks)

This regulation is not applicable to the Permitted Source for the following reason(s): this source has no equipment in organic hazardous air pollutants (OHAP) service. [Last updated November 29, 2007]

III.D 40 CFR 63 Subpart B (Requirements for Control Technology Determinations for Major Sources)

This regulation is not applicable to the Permitted Source for the following reason(s): this source is

not a major source of hazardous air pollutants. [Last updated November 29, 2007]

III.E 40 CFR 60 Subpart GG (Standards of Performance for Stationary Gas Turbines)

This regulation is not applicable to the ICE-2: Turbines for Backup Power for the following reason(s): these gas turbines are used only for emergency power (NSPS 60.332(g)). [Last updated November 29, 2007]

SECTION IV: ACID RAIN PROVISIONS

This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

Incorporates DAQE-AN0115320007A-08 dated January 23, 2008

- 1. Comment on an item originating in Renewal Application regarding Permitted Source CAM plan for ICE-4: ICE-4 was verified as subject to CAM through use of AP-42 5th ed factors and fuel input. The plan submitted by the source had five parameters; three of these are used in the permit. One parameter measured a change in temperature across the catalyst; it was not used because the initial performance test showed no correlation between this temperature and the ability of the catalyst to perform well. Also, in the RICE MACT preamble (p 33492-3), EPA notes the same issue and dropped this parameter from the MACT monitoring requirements. The other source-suggested parameter is an inspection and maintenance approach that is already implicit in the "proper maintenance" provision of the permit. Additionally, these parameters are in line with the results of a stack test performed on 9/14/05. [5/12/2006] [Last updated November 29, 2007]
- 2. Comment on an item originating in Renewal Application regarding Permitted Source Changes requested and/or made during renewal:
 - 1) Several minor changes to section II.A, emission unit list, per source request, including tank list corrections; deletion of MISC-2 refuse combustor; addition of Dew Point vent as MISC-3; addition of parts washer as new MISC-2; and clarification of Dew Point emission points. CBDP-1 is now used as catch-all for "equipment" in CBDP process unit subject to 40 CFR 60 subpart KKK.
 - 2) Condition II.B.5,6,7 removed: source indicated in app that Kb requirement in II.B.6 applied to condensate tanks instead of waste water tank; however, Kb was revised during renewal such that the requirement no longer exists for any of the tanks in this permit.
 - 3) The stack test interval for NO_x and CO testing was changed to five years to correspond to the underlying approval order.
 - 4) The language in II.B.2.c.1.(d)(3) was shortened, since subpart GG now allows the use of 0 wt% nitrogen, and such was presumably used in calculation of the numerical limit.
 - 5) Removed II.B.4.a requiring continuous program of installation, ICE-4 has been installed. Also removed the "initial testing" requirement under NO_x and CO monitoring for this unit, since the initial test was performed on 8/22/02.
 - 6) Methods for NO_x testing for ICE-1 were updated to correspond to the 7/8/04 revisions to Subpart GG. [11/26/2004] [Last updated November 29, 2007]
- 3. Comment on an item originating in 40 CFR 60 Subpart A regarding Permitted Source
 Operation and maintenance requirements: 40 CFR 60.11(d) provides operation and
 maintenance (O & M) requirements for equipment subject to an NSPS standard. These
 requirements apply to the three compressor turbines and the Clay Basin Dew Point Plant.
 [11/12/2004] [Last updated November 29, 2007]
- 4. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG NO_x standard and NO_x limit in AO: NO_x standard in Subpart GG is:

$$STD = 0.0075 (14.4)/Y + F$$

where

 $STD = allowable NO_x$ emissions (percent by volume at 15 percent oxygen and on a dry

basis

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

 $F = NO_x$ emission allowance for fuel-bound nitrogen.

EPA guideline document EMTIC, GD-009 advises to use zero for the value of F for gas turbines. So, the lowest NO_x limit is 0.0075 percent by volume when Y=14.4. NO_x limit in AO is 42 ppmv or 0.0042 percent by volume which is more stringent than the Subpart GG standard. Therefore, NSPS standard is subsumed in the AO limit. In order to use equation in 40 CFR Part 60.335(c)(1) to compute the NO_x emissions, NO_x limit is expressed in the unit of percent by volume in this permit. [2/05/2002] [Last updated November 29, 2007]

5. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG Requirement for Monitoring Sulfur Content: The permittee's gas transportation tariff requires that the total sulfur content in the pipeline gas be limited to no greater than 5 grains of total sulfur per Mcf which is equivalent to 0.002 % by weight. This is significantly (400 times) lower than the permit limit of 0.8 % by weight. Compliance with the tariff is deemed to meet the permit requirement. Questar Pipeline Company's Federal Energy Regulator Commission (FERC) Gas Tariff functions as a procedure manual that set out the manner in which Questar is required to provide these services to its customers. The tariff is effective indefinitely. Therefore, recording of the tariff can serve as monitoring for the sulfur content. This approach is confirmed in 60.334(h)(3)(i) as added at 69 FR 41361, July 8, 2004. [3/09/2005] [Last updated November 29, 2007]

6. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG Standard for SO₂: 40 CFR Subpart GG, 60.333 requires either emission limit of no greater than 0.015 percent by volume (15% oxygen on a dry basis) or sulfur content of no greater than 0.8 percent by weight in the fuel. The source chooses to comply with the sulfur content limit in the fuel. According to the letter from Questar dated May 7, 1998 regarding Kastler Station Operating Permit Review Questions, Questar's gas transportation tariff requires that total sulfur content in pipeline gas be limited to 0.002% by weight. [5/28/1998] [Last updated November 29, 2007]

7. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG requirement for monitoring fuel-bound nitrogen content of turbine fuel: Subpart GG requires the monitoring of the fuel-bound nitrogen. The pipeline quality natural gas usually has no fuel-bound nitrogen. EPA guideline document, EMTIC GD-009 indicates that there is no good test method to distinguish between fuel-bound nitrogen and other forms of nitrogen such as dissolved air, in fuels used in gas turbines. A Memorandum from EPA Headquarters dated August 14, 1987 regarding Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG states that nitrogen monitoring can be waived for pipeline quality gas since there is no fuel-bound nitrogen and since free nitrogen does not contribute appreciably to NO_x emissions. Additionally, the July 8, 2004 changes to Subpart GG only require monitoring of nitrogen content if an allowance is claimed in calculating test results; this source does not use the allowance. Therefore, Subpart GG requirement for fuel-bound nitrogen content monitoring is not incorporated into the permit. [11/12/2004] [Last updated November 29, 2007]

8. Comment on an item originating in 40 CFR 60 Subpart GG regarding ICE-1: Turbines for Gas Compression

Subpart GG requirements related to water injection and emergency fuel: Turbines have low NO_x burners to control NO_x emissions and there is no water injection. Also, this source does not use an emergency fuel. Therefore, the associated requirements with water injection and emergency fuel in Subpart GG do not apply to the turbines. [2/05/2002] [Last updated November 29, 2007]

9. Comment on an item originating in DAQE-AN0115320007A-08 regarding ICE-3: Internal Combustion Engines

Significant emission increase: In order to demonstrate that modifications approved in the referenced AO do not result in a significant emission increase for NO_x , the permittee is required to calculate monthly emissions from the existing turbines (ICE-1) and engines (ICE-3) and keep a rolling 12-month total of incremental NO_x emissions increase from the new equipment.

According to the AO, the NO_x emissions from the existing engines and turbines are "determined by monitoring the hours of operation and utilizing emission factors from the most recent testing." However, the existing engines (ICE-3) are not subject to a NO_x limit and therefore have no testing requirements.

The permittee has voluntarily committed to NO_x testing on the ICE-3 engines similar to the portable monitoring provision allowed in the AO for other units. Testing on the ICE-3 engines will occur as follows.

The permittee will perform an initial test on each ICE-3 engine using 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E. During the initial test, a correlation must be established between the portable testing monitor and the reference method test. Thereafter, the permittee shall test every five years with the portable testing monitor.

Results of the testing for the ICE-3 engines will be used in the monthly calculations required in Condition II.B.1.c of this permit. [Last updated January 29, 2008]